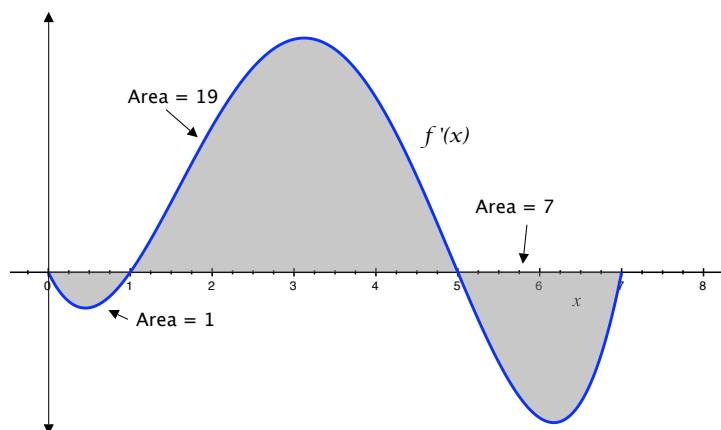


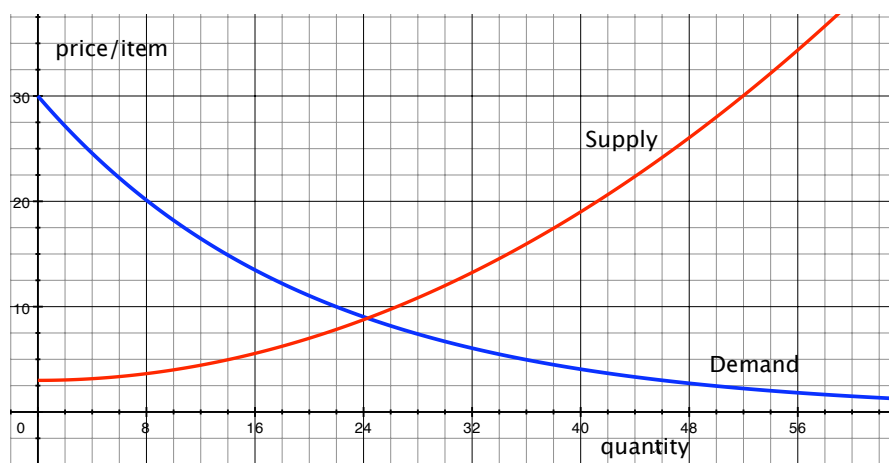
## Math 112 Worksheet #7

March 9, 2007

1. Sketch a graph of  $f$  given that  $f(5) = 2$  and the graph of  $f'(x)$  below. What are the global maximum and minimum values of  $f$ ?



2. The temperature of a baked potato in Fahrenheit  $t$  minutes after being taken out of the oven is given by  $P(t) = 65 + 285e^{-.05t}$ .
- What is the temperature of the potato when it is taken out of the oven?
  - What is the temperature of the potato on hour after it is taken out of the oven?
  - What is the average value of the temperature from time over the first hour?
3. Graphs of supply and demand curves for selling gigantic erasers are given below.



- Estimate the consumer and producer surplus if the market is in equilibrium.
- Estimate the consumer and producer surplus if the price is kept artificially high at \$15.